

REMARKS/ARGUMENTS

Claims 55-66 are active in this application.

These claims are supported by original Claims 1-55 and the specification as originally filed. Furthermore, Claims 55-66 are drawn to the elected subject matter, i.e., DNA encoding SEQ ID NO. 4 (as in original Claim 10), a nucleotide sequence of SEQ ID NO: 3 or a polynucleotide hybridizing to SEQ ID NO:3 (as in original Claims 11 and 12), cells comprising the isolated DNA, methods for reducing erythrose reductase type II and following the Examiner's comment of rejoinder of original Claim 41 at the top of page 4 in the Official Action, Claims 64-66 have also been added.

No new matter is believed to have been added by these amendments.

The rejection of Claims 10-16 under 35 U.S.C. § 101 is obviated by the cancellation of the claims. As suggested by the Examiner, the claims are directed to an "isolated" DNA.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 10-16 under 35 U.S.C. § 112, first paragraph is obviated by the cancellation of the claims.

Claims 55 and 56 are defined by the amino acid or nucleotide sequence as described in the application. With respect to Claim 57, Applicants appreciate the discussion held with the Applicants' undersigned representative in which the substance of this claim was discussed. In particular, it was discussed to include the conditions defining the "stringent conditions" as described in the application and include the requirement that the polynucleotide which hybridizes to SEQ ID NO:3 also encodes a protein having erythrose reductase type II activity. Both of these elements are present in new Claim 57.

Applicants also direct the Examiner's attention to Example 9 of the "Synopsis of Application of Written Description Guidelines" which analyzes a situation where a claim covers a genus of nucleotide sequences that hybridize under stringent conditions to a disclosed sequence having a particular activity. In these guidelines, the Patent Office has concluded that such claims are adequately described within the meaning of 35 U.S.C. § 112, first paragraph. Accordingly, withdrawal of this ground of rejection is requested.

The rejection of Claims 10-16 under 35 U.S.C. § 112, first paragraph (enablement) is obviated by the cancellation of these claims.

The rejection of Claims 10-14 under 35 U.S.C. § 112, second paragraph is obviated by the cancellation of these claims.

The rejection of Claims 10-16, 31-34 and 47-50 under 35 U.S.C. § 102(b) over Kita et al. is obviated by the cancellation of these claims.

Kita et al. do not describe an isolated DNA encoding a protein comprising the amino acid sequence of SEQ ID NO:4 (as in Claim 55), an isolated DNA comprising SEQ ID NO:3 (as claimed in Claim 56) or the isolated DNA as defined in Claim 57. With respect to Claim 57 as noted by the Examiner, Kita describes a molecule encoding an aldehyde reductase but does not describe a DNA encoding an erythrose reductase type II enzyme as required in Claim 57.

Accordingly, withdrawal of this ground of rejection is requested.

Applicants also request allowance of all pending claims. Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Daniel J. Pereira, Ph.D.

Attorney of Record

Registration No. 45,518

Customer Number

22850

Tel: (703) 413-3000

Fax: (703) 413 -2220